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EXAMINER	
DEL SOLE, JOSEPH S	

ART UNIT	PAPER NUMBER
1722	

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/812,123	KIRCHHOFF, BERND	
	Examiner	Art Unit	
	Joseph S. Del Sole	1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 May 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Priority Document

1. The Examiner has withdrawn the portion of rejections drawn to the Babin et al because the Applicant has fulfilled the requirements of MPEP 201.15 and submitted a translation, stated to be accurate, of the foreign priority document.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-6, 8-9, 11-13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Beeck et al (DE19935982A1).

Beeck et al teach

1: a spinneret assembly for melt spinning a plurality of strand-like filaments and having an external housing (Fig 1, #1;

a plurality of internal parts (Fig 1, #s 2, 3, 4) positioned in the housing and including at least one inlet component and a spinneret plate (Fig 1, #3), with the inlet component including an inlet for admitting a melt into the interior of the housing and the spinneret plate including a plurality of spin holes (Fig 1) which serve as a melt outlet from the housing,

means joined to the housing for supporting the internal parts relative to each other in the housing (Fig 1),

at least one expansion body (Fig 1, #s 2 and 3) arranged in the housing between the housing and one of the internal parts, with the expansion body being positioned such that upon being heated a pressure force would be generated which provides a self sealing bracing of the internal parts (Fig 1);

2. the supporting means, supports the internal components in a clamping direction, and wherein the expansion body is positioned such that upon being heated it would apply a force to the internal parts in an expansion direction that is aligned with the clamping direction (Fig 1);

3. the expansion body is configured such that upon being heated, it would expand primarily in the expansion direction (Fig 1);

4. the expansion body (Fig 1, #s 2 and 3) is in the form of a ring which is positioned between the inlet component and the housing (Fig 1);

5. the expansion body is formed by a plurality of separate expansion pieces which are positioned between the inlet component and the housing (Fig 1, #s 2 and 3);

6. at least one pressure plate (Fig 1, #2 or #3) positioned in the housing between the expansion body and the housing or between the expansion body and the inlet component (Fig 1);

8. the expansion body is permanently joined to the housing or to one of the internal parts (Fig 1);

9. the selection of materials for the spinneret that has increased expansion at operation temperature in relation to the housing for the purpose of achieving tight sealing (abstract);

11. the expansion body is formed of a material whose melting temperature is above about 500 degrees C (col 3, line 1);

12. the expansion body is positioned in the housing so as to be exchangeable (Fig 1);

13. the housing is of generally cylindrical configuration so as to define a central axis which is generally parallel to direction of the melt flow through the housing, with the housing including an integral flange at one end and an external thread at the other end, wherein the supporting means comprises a screw cap which is threadedly joined to the external thread at said other end of the housing and which includes a radial collar, and wherein the internal parts are supported between the integral flange of the housing and the radial collar of the screw cap (Fig 1);

15. a tubular configuration of a housing (Fig 1) wherein the central axis is generally perpendicular to the direction of the melt flow through the housing, the housing defining an axially extending internal collar which supports the spinneret plate thereupon, wherein the supporting means has a plurality of screw caps which are disposed in threaded openings which extend through the cover and perpendicularly with respect to the central axis.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Beeck et al (DE19935982A1) n view of Kilsdonk (3,762,854)

Beeck et al (DE19935982A1) each the apparatus as discussed above.

Beeck et al (DE19935982A1)et al fail to teach the housing is of generally rectangular configuration and includes opposite ends which are spaced apart in the direction of the melt flow through the housing, said housing including a cover overlying one end thereof and a radial collar at the opposite end, wherein the internal parts are supported between the cover and the radial collar, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover.

Kilsdonk teaches the housing is of generally rectangular configuration (Fig 3) and includes opposite ends which are spaced apart in the direction of the melt flow through the housing, said housing including a cover overlying one end thereof and a radial collar at the opposite end, wherein the internal parts are supported between the cover and the radial collar, and wherein the supporting means comprises a plurality of screw caps

which are disposed in threaded openings which extend through the cover (Figs 1 and 2).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the housing configuration of Beeck et al with a tubular configuration as taught by Kilsdonk because such a configuration enables differing relative placements of the components forming the apparatus.

Additionally, the Examiner notes that general spinneret configurations such as the rectangular configuration set forth in claim 14 is notoriously well known in the art.

7. Claims 1-6 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lenk (3,891,379) in view of Trott (5,507,498).

Lenk teaches

1: a spinneret assembly for melt spinning a plurality of strand-like filaments and having

an external housing (Fig 1, #s 2, 3 and 9);

a plurality of internal parts (Fig 1, #s 4, 8, 6) positioned in the housing and including at least one inlet component and a spinneret plate (Fig 1, #4), with the inlet component including an inlet for admitting a melt into the interior of the housing and the spinneret plate including a plurality of spin holes (Fig 1, #21) which serve as a melt outlet from the housing,

means joined to the housing for supporting the internal parts relative to each other in the housing (Fig 1, #s 10, 7 and 7'),

at least one expansion body (Fig 1, #s 7 and 7') arranged in the housing between the housing and one of the internal parts, with the expansion body being positioned

such that upon being heated a pressure force would be generated which provides a self sealing bracing of the internal parts (Fig 1);

2. the supporting means, supports the internal components in a clamping direction, and wherein the expansion body is positioned such that upon being heated it would apply a force to the internal parts in an expansion direction that is aligned with the clamping direction (Fig 1);

3. the expansion body is configured such that upon being heated, it would expand primarily in the expansion direction (Fig 1);

4. the expansion body (Fig 1, #7') is in the form of a ring which is positioned between the inlet component and the housing (Fig 1);

5. the expansion body is formed by a plurality of separate expansion pieces which are positioned between the inlet component and the housing (Fig 1, #s 7 and 7');

6. at least one pressure plate (Fig 1, #5) positioned in the housing between the expansion body and the housing or between the expansion body and the inlet component (Fig 1);

12. the expansion body is positioned in the housing so as to be exchangeable (Fig 1);

13. the housing is of generally cylindrical configuration so as to define a central axis which is generally parallel to direction of the melt flow through the housing, with the housing including an integral flange at one end and an external thread at the other end, wherein the supporting means comprises a screw cap which is threadedly joined to the external thread at said other end of the housing and which includes a radial collar, and

wherein the internal parts are supported between the integral flange of the housing and the radial collar of the screw cap (Figs 1, 4 and 5);

14. the housing is of generally rectangular configuration and includes opposite ends which are spaced apart in the direction of the melt flow through the housing, said housing including a cover overlying one end thereof and a radial collar at the opposite end, wherein the internal parts are supported between the cover and the radial collar, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover (Figs 1, 2 and 3);

Lenk fails to teach with the expansion body being formed of a material which has a higher thermal expansion coefficient in comparison to that of the housing material, and the expansion body is formed of a material whose melting temperature is above about 500 degrees C.

Trott teaches an expansion body seal formed of a material which has a higher thermal expansion coefficient in comparison to that of the housing material and the expansion body is formed of a material whose melting temperature is above about 500 degrees C (Fig 3, #s 30 and 32) for the purpose of producing an improved seal by the wedging effect created by the expansion (col 1, lines 40-60).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Lenk with the seal being of a material which has a higher thermal expansion coefficient that the housing material as taught by Trott because such material quality enables improved sealing by the wedging effect created by the expansion of the seal when heated.

Additionally, the Examiner notes that general spinneret configurations such as the cylindrical and rectangular configurations set forth in claims 13 and 14 are notoriously well known in the art.

8. Claims 1-4, 6 and 10-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kretzschmar et al (5,662,947) in view of Trott (5,507,498).

Kretzschmar teaches

1: a spinneret assembly for melt spinning a plurality of strand-like filaments and having an external housing (Fig 5, # 3 and 24);

a plurality of internal parts (Fig 5, #s 9, 31 and 10) positioned in the housing and including at least one inlet component and a spinneret plate (Fig 5, #9), with the inlet component including an inlet for admitting a melt into the interior of the housing and the spinneret plate including a plurality of spin holes (Fig 5, #41) which serve as a melt outlet from the housing,

means joined to the housing for supporting the internal parts relative to each other in the housing (Fig 5),

at least one expansion body (Fig 5, # 20) arranged in the housing between the housing and one of the internal parts, with the expansion body being positioned such that upon being heated a pressure force would be generated which provides a self sealing bracing of the internal parts (Fig 5);

2. the supporting means, supports the internal components in a clamping direction, and wherein the expansion body is positioned such that upon being heated it would apply a

force to the internal parts in an expansion direction that is aligned with the clamping direction (Fig 5);

3. the expansion body is configured such that upon being heated, it would expand primarily in the expansion direction (Fig 1);

4. the expansion body (Fig 5, #7') is in the form of a ring which is positioned between the inlet component and the housing (Fig 5);

6. at least one pressure plate (Fig 5, #14) positioned in the housing between the expansion body and the housing or between the expansion body and the inlet component (Fig 1);

10. a filter insert and an apertured plate positioned in the housing between the inlet component and the spinneret plate and so as to be held in place by the supporting means (Fig 5, #s 38 and 10);

12. the expansion body is positioned in the housing so as to be exchangeable (Fig 1);

13. the housing is of generally cylindrical configuration so as to define a central axis which is generally parallel to direction of the melt flow through the housing, with the housing including an integral flange at one end and an external thread at the other end, wherein the supporting means comprises a screw cap which is threadedly joined to the external thread at said other end of the housing and which includes a radial collar, and wherein the internal parts are supported between the integral flange of the housing and the radial collar of the screw cap (Fig 5).

Kretzschmar fails to teach with the expansion body being formed of a material which has a higher thermal expansion coefficient in comparison to that of the housing

material, and the expansion body is formed of a material whose melting temperature is above about 500 degrees C.

Trott teaches an expansion body seal formed of a material which has a higher thermal expansion coefficient in comparison to that of the housing material and the expansion body is formed of a material whose melting temperature is above about 500 degrees C (Fig 3, #s 30 and 32) for the purpose of producing an improved seal by the wedging effect created by the expansion (col 1, lines 40-60).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Kretzschmar with the seal being of a material which has a higher thermal expansion coefficient that the housing material as taught by Trott because such material quality enables improved sealing by the wedging effect created by the expansion of the seal when heated.

Additionally, the Examiner notes that general spinneret configurations such as the cylindrical configuration set forth in claim 13 is notoriously well known in the art.

9. Claims 1-8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schroeder et al (5,304,052) in view of Trott (5,507,498).

Schroeder et al teach

1: a spinneret assembly for melt spinning a plurality of strand-like filaments and having an external housing (Fig 4, #s 1 and 13);

a plurality of internal parts (Fig 4, #s 7, 17, 18) positioned in the housing and including at least one inlet component and a spinneret plate (Fig 1, #7), with the inlet component including an inlet for admitting a melt into the interior of the housing and the

spinneret plate including a plurality of spin holes which serve as a melt outlet from the housing,

means joined to the housing for supporting the internal parts relative to each other in the housing (Fig 4, # 20),

at least one expansion body (Fig 4, #s 46 and 52) arranged in the housing between the housing and one of the internal parts, with the expansion body being positioned such that upon being heated a pressure force would be generated which provides a self sealing bracing of the internal parts (Fig 4);

2. the supporting means, supports the internal components in a clamping direction, and wherein the expansion body is positioned such that upon being heated it would apply a force to the internal parts in an expansion direction that is aligned with the clamping direction (Fig 4);

3. the expansion body is configured such that upon being heated, it would expand primarily in the expansion direction (Fig 4);

4. the expansion body (Fig 4, #s 46 and 52) is in the form of a ring which is positioned between the inlet component and the housing (Fig 4);

5. the expansion body is formed by a plurality of separate expansion pieces which are positioned between the inlet component and the housing (Fig 4, #s 46 and 52);

6. at least one pressure plate (Fig 4, #18) positioned in the housing between the expansion body and the housing or between the expansion body and the inlet component (Fig 4);

7. a spring member (Fig 4, #11) positioned in the housing between the housing and the spinneret plate or between the housing and the inlet component such that a spring force is operative in the clamping direction and a gap is formed between the housing and the spinneret plate or the inlet component;

8. the expansion body is permanently joined to the housing or to one of the internal parts (Fig 4);

13. the housing is of generally cylindrical configuration so as to define a central axis which is generally parallel to direction of the melt flow through the housing, with the housing including an integral flange at one end and an external thread at the other end, wherein the supporting means comprises a screw cap which is threadedly joined to the external thread at said other end of the housing and which includes a radial collar, and wherein the internal parts are supported between the integral flange of the housing and the radial collar of the screw cap (Fig 4);

Schroeder et al fail to teach with the expansion body being formed of a material which has a higher thermal expansion coefficient in comparison to that of the housing material, and the expansion body is formed of a material whose melting temperature is above about 500 degrees C.

Trott teaches an expansion body seal formed of a material which has a higher thermal expansion coefficient in comparison to that of the housing material and the expansion body is formed of a material whose melting temperature is above about 500 degrees C (Fig 3, #s 30 and 32) for the purpose of producing an improved seal by the wedging effect created by the expansion (col 1, lines 40-60).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Schroeder with the seal being of a material which has a higher thermal expansion coefficient that the housing material as taught by Trott because such material quality enables improved sealing by the wedging effect created by the expansion of the seal when heated.

Additionally, the Examiner notes that general spinneret configurations such as the cylindrical configuration set forth in claim 13 is notoriously well known in the art.

10. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Lenk (3,891,379), Kretzschmar et al (5,662,947) and Schroeder et al (5,304,052), any in view of Trott (5,507,498) and further in view of any of DD125421 or DE19932852.

Lenk, Kretzschmar et al, Schroeder et al, and Trott teach the apparatus as discussed above.

Lenk, Kretzschmar et al and Schroeder et al fail to teach the housing being formed of a material which has a lower thermal expansion coefficient in comparison to the materials of the inlet component and the spinneret plate.

DE19932852 teaches the selection of materials for the spinneret that has increased expansion at operation temperature in relation to the housing for the purpose of achieving tight sealing (abstract). DE19935982 teaches the selection of materials for the spinneret that has increased expansion at operation temperature in relation to the housing for the purpose of achieving tight sealing (abstract). DD125421 teaches the selection of materials for the spinneret that has increased expansion at operation

temperature in relation to the housing for the purpose of achieving a tight and self-sealing effect (as noted in Applicant's specification).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the inventions of Lenk, Kretzschmar et al and Schroeder et al with the housing being formed of a material which has a lower thermal expansion coefficient in comparison to the materials of the inlet components and the spinneret plate as taught by each of DE19932852, DE19935982 and DD125421 because such material selection enables tight self-sealing of components during heated operation of the apparatus.

11. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Lenk (3,891,379), Kretzschmar et al (5,662,947) and Schroeder et al (5,304,052), any in view of Trott (5,507,498) and further in view of Goossens (3,500,499).

Lenk, Kretzschmar et al, Schroeder et al, Babin et al and Trott teach the apparatus as discussed above.

Lenk, Kretzschmar et al and Schroeder et al fail to teach the housing is of generally tubular configuration so as to define a central axis which is generally perpendicular to the direction of the melt flow through the housing, with the housing defining an axially extending internal collar which supports said spinneret plate thereupon, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover and perpendicularly with respect to said central axis and said spinneret plate.

Goossens teaches a tubular configuration of a housing (Fig 3, see #19) wherein the central axis is generally perpendicular to the direction of the melt flow through the housing, the housing defining an axially extending internal collar which supports the spinneret plate thereupon, wherein the supporting means has a plurality of screw caps which are disposed in threaded openings which extend through the cover and perpendicularly with respect to the central axis.

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the housing configuration of any of Lenk, Kretzschmar et al and Schroeder et al with a tubular configuration as taught by Goossens because such a configuration enables differing relative placements of the components forming the apparatus.

Additionally, the Examiner notes that general spinneret configurations such as the tubular configuration set forth in claim 15 is notoriously well known in the art.

12. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over any of Lenk (3,891,379), Kretzschmar et al (5,662,947) and Schroeder et al (5,304,052), any in view of Trott (5,507,498) and further in view of Lenk et al (4,645,444).

Lenk, Kretzschmar et al, Schroeder et al, Babin et al and Trott teach the apparatus as discussed above.

Lenk, Kretzschmar et al and Schroeder et al fail to teach the housing is of generally tubular configuration so as to define a central axis which is generally perpendicular to the direction of the melt flow through the housing, with the housing defining an axially extending internal collar which supports said spinneret plate

thereupon, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover and perpendicularly with respect to said central axis and said spinneret plate.

Lenk et al teach a tubular configuration of a housing (Fig 2, see #15) wherein the central axis is generally perpendicular to the direction of the melt flow through the housing, the housing defining an axially extending internal collar which supports the spinneret plate thereupon, wherein the supporting means has a plurality of screw caps which are disposed in threaded openings which extend through the cover and perpendicularly with respect to the central axis (Figs 1 and 2).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the housing configuration of any of Lenk, Kretzschmar et al and Schroeder et al with a tubular configuration as taught by Lenk et al because such a configuration enables differing relative placements of the components forming the apparatus.

Additionally, the Examiner notes that general spinneret configurations such as the tubular configuration set forth in claim 15 is notoriously well known in the art.

13. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over either of Kretzschmar et al (5,662,947) and Schroeder et al (5,304,052), any in view of Trott (5,507,498) and further in view of Kilsdonk (3,762,854)

Kretzschmar et al, Schroeder et al, Babin et al and Trott teach the apparatus as discussed above.

Kretzschmar et al and Schroeder et al fail to teach the housing is of generally rectangular configuration and includes opposite ends which are spaced apart in the direction of the melt flow through the housing, said housing including a cover overlying one end thereof and a radial collar at the opposite end, wherein the internal parts are supported between the cover and the radial collar, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover.

Kilsdonk teaches the housing is of generally rectangular configuration (Fig 3) and includes opposite ends which are spaced apart in the direction of the melt flow through the housing, said housing including a cover overlying one end thereof and a radial collar at the opposite end, wherein the internal parts are supported between the cover and the radial collar, and wherein the supporting means comprises a plurality of screw caps which are disposed in threaded openings which extend through the cover (Figs 1 and 2).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the housing configuration of either of Kretzschmar et al and Schroeder et al with a tubular configuration as taught by Kilsdonk because such a configuration enables differing relative placements of the components forming the apparatus.

Additionally, the Examiner notes that general spinneret configurations such as the rectangular configuration set forth in claim 14 is notoriously well known in the art.

Response to Arguments

14. Applicant's arguments filed 5/11/06 have been fully considered but they are not persuasive.

Initially the Examiner would like to note that despite the discussion in the Applicant's specification that DE19935982 differs from the Applicant's invention, the Examiner finds the *claimed* invention to be unpatentable in view of DE19935982. The expansion body as claimed can read on being either the spinneret plate or the filter body, while the remaining feature is part of the claimed internal parts. To overcome the DE19935982 reference the claims must be amended to differentiate the expansion body from a spinneret plate or filter body. The Examiner notes that such an amendment may create a new issue in the application.

The Applicant argues that the Babin reference is not proper as prior art.

The Examiner agrees as stated above.

The Applicant argues that modifying Lenk with a seal gasket having a higher thermal expansion coefficient than the housing because it would counteract the desired "automatic seals" of Lenk.

The Examiner disagrees. The seals of Lenk are automatic in that they activate during use of the apparatus. Seals that expand, as taught by Trott, are also automatic and thus do not counteract the seals of Lenk. Seals whose sealing affect is caused by pressure and expansion are more effective than sealing due to pressure or expansion alone.

The Applicant argues that Trott teaches away from the present invention because the ring expands outwardly.

While the ring does expand outwardly in Trott, the Examiner disagrees that this teaches away. The teaching of Trott merely suggests the use of a thermal expansion property with the seal of Lenk so that the sealing affect is increased.

The Applicant argues that Trott teaches away from the present invention because Trott teaches that this construction is disadvantageous, particularly at temperatures above 500F.

The Examiner disagrees. Trott teaches that there are some beneficial uses of thermal expansion seals and some drawbacks to thermal expansion seals. The benefits disclosed in Trott would benefit if used in Lenk, as discussed above.

The Applicant argues that Trott teaches away from the present invention because radial force is taught and the present invention requires axial direction.

The Examiner disagrees. What Trott teaches is expansion, the direction is based on the exact dimensions and placement of the seal and it is obvious to use a seal that thermally expands, having dimensions amenable to the needed force direction.

The Applicant argues that there is no teaching in Kretzschmer of the concept of fabricating the seal of a material which upon heating generates a pressure force which seals the components in the housing.

While this may be true, the Examiner notes that, as discussed above, Kretzschmer in combination with Trott teaches the invention as claimed.

The Applicant argues that there is no reason why the seals of Schroeder would benefit from expansion upon heating.

The Examiner disagrees. The seals of Schroeder cut off the path of flow of a material. Expansion of the seal would increase the force of which the cut-off of the path is maintained which would increase the efficiency of the seal.

The Applicant argues that the prior art references applied to claims 9, 14 and 15 do not overcome the efficiencies of the primary references.

As discussed above, the Examiner disagrees that there are deficiencies in the primary references.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on M-F 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph S. Del Sole
5/18/06